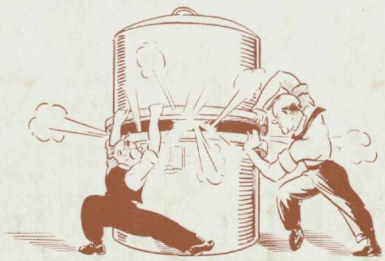
G-E Campus News



A BIG SQUEEZE

IT TAKES a lot of squeeze to put a 1,000,000-volt x-ray equipment in a container only four feet in diameter and seven feet long, especially when its less-powerful predecessors required a special building 62 feet long, 32 feet wide, and 36 feet high. But recently, G-E scientists applied the necessary squeeze and completed some surprisingly compact x-ray equipment.

Such squeezing naturally involves a few innovations in design. So innovations were introduced. The 11-section x-ray tube was put inside the novel transformer, in the space normally taken by an iron core. Gas having an impressive-sounding name, dichlorodifluoromethane, was used instead of oil as an insulating medium, 100 pounds of this gas doing the work of six tons of conventional oil.

Then the equipment was mounted in the grounded metal container, thereby enclosing the 1,000,000-volt circuit and eliminating the hazard of electric shock. Looking at the apparatus, you note a striking absence of moving parts, for the control of the apparatus is essentially electrical.

The first of the new units will be installed this spring in Memorial Hospital, New York City, providing medical science with another powerful weapon in its constant war on disease.

LIGHTS! ACTION! CAMERA!

IN A specially constructed room alongside the studios of the G-E international short-wave stations, the familiar words, "Lights! Action! Camera!" will soon be heard.

For General Electric's new television station at Schenectady is nearing completion.

The television transmitter, perched atop the Helderberg Hills 12 miles outside the city, will be at least 250 feet higher than the station in the tower of the Empire State building, New York. And, broadcasting with 10,000 watts, it will be the most powerful television station in the United States.

There will be—literally—no strings to the transmitter. C. A. Priest, Maine '22 and an ex-Test man, Engineer of the Radio Transmitter Engineering Department of General Electric, has announced that an ultra-short-wave transmitter will be used instead of the usual cable to relay the images from the Schenectady studios to the main transmitter in the Helderbergs.

THE "HOUSE OF MAGIC" BECOMES TWINS

THE world-famous G-E "House of Magic" show has become twins. It had to, for it was placed in the predicament of having to be in two places at one time—the New York and the San Francisco Fairs.

One twin—directed by R. L. Smallman, Calif. Tech '33 and ex-Test man—is already holding court on San Francisco's Treasure Island, site of the Pageant of the Pacific. The other makes its bow April 30, opening day of the New York World's Fair. Its director is W. A. Gluesing, Wisconsin '23, also an ex-Test man.

The thousands of visitors to these Fairs will see such feats of modern magic as a voice-controlled toy train, a magic carpet, zigzagging pictures of sound. They will see the stroboscope, which makes it possible to see the spokes of a whirling wheel just as if the wheel were motionless. They will see a light beam sawed by the teeth of a comb.

However, entertaining as these demonstrations are, they represent far more than mere tricks of modern magic. They symbolize the work in pure science that is constantly taking place in G-E research laboratories—work which is the basis of General Electric's contributions to the world of the future.

GENERAL ELECTRIC

90-126C